What Time Is and What Time Is Not

Scott Matheson Hitchcock

08/08/21

A review of the 7 principles found to be the actual nature of time.

See my various papers about time on: https://archive.org/details/@nonessentialtime_gmail_com

1. **Philosophy of Time**: time exists as information, NOT as a dimension. Time is as real as information is real.

2. **Arrows of Time: Quantum Arrows of Time [QATs]** and all other arrows of time only exist as constructions from signal/information flow in causal networks. All arrows of time point from cause [source] to effect [sink] from simple 2-level systems at the quantum scale such as photon emission in atoms up through the cosmological domain through hierarchical scaling of interconnected causal networks at various plateaus of complexity [POCs].

3. **Direction of Time:** only exists as directions associated with vectors representing arrows of time pointing from cause to effect [source to sink] in the causal networks of the evolving universe.

4. **There is no Time to travel 'in', only space [i.e. the vacuum]** where the 'now' created by our consciousness is all we can directly experience. Note that the vacuum exists as a physical entity and space is only a map of this fundamental basis for the universe. “The Map is not the territory” - Alfred Korzybski

5. **Our brains T-computer creates ‘time’ labeled maps of the patterns of observed changes in the configurations of matter in the universe into sequential time stamped and labeled memories.** Change is a Fundamental property of the universe, time is not. No change means no time.

- **See the following paper at: T-computers and the Origins of Time in the Brain**

6. **The Problem of Time** therefore has been solved using Feynman Clocks, T-computers, and Causal Networks.

7. **The Vacuum is space and Time is a measure of Changes in the configuratons of matter floating on the surface of the vacuum.** We attribute dimensions to the vacuum [space] as part of our application of geometry [models] to the real world. The vacuum is much more complex that mere ‘empty’ space. The vacuum is in fact a multi-vacuum with properties that depend locally on matter and globally on cosmic universality. Cosmological evolution is measured by the maps of change we construct using time as a metric.

Note: the speed of light is a fundamental property of the multi-vacuum ‘surface’ of the deep energy sea that contains the missing mass and dark energy of the universe. This is why it can’t be violated by mythical particles such as **tachyons** or space-time fabrications and fantasies such as cosmic tunnels or **wormholes**.

See the following for a discussion of why space-time diagrams are wrong especially when looking at time as a fundamental property of the universe:

- **Article: “The Theory of Positrons” Phys. Rev. 76, 749 – Published 15 September 1949 is shown to be wrong concerning time reversal by Scott Matheson Hitchcock**

- **The PDF full version of Feynman's original paper* is at: https://authors.library.caltech.edu/3520/1/FEYpr49b.pdf**

Special Note: Time is still useful as a measure of change in our daily lives. Using repeating reproducible regular signal generating systems such as standard clocks [e.g. atomic clocks, watches, computer clocks etc.] gives us a way to create our ordered time maps. Time produced by comparison of a standard clock with the observed system and processed by our brains T-computer or similar ‘clocked’ information processing devices is ‘real’. The reality of time as a pacer of human activities is embedded in our lives.